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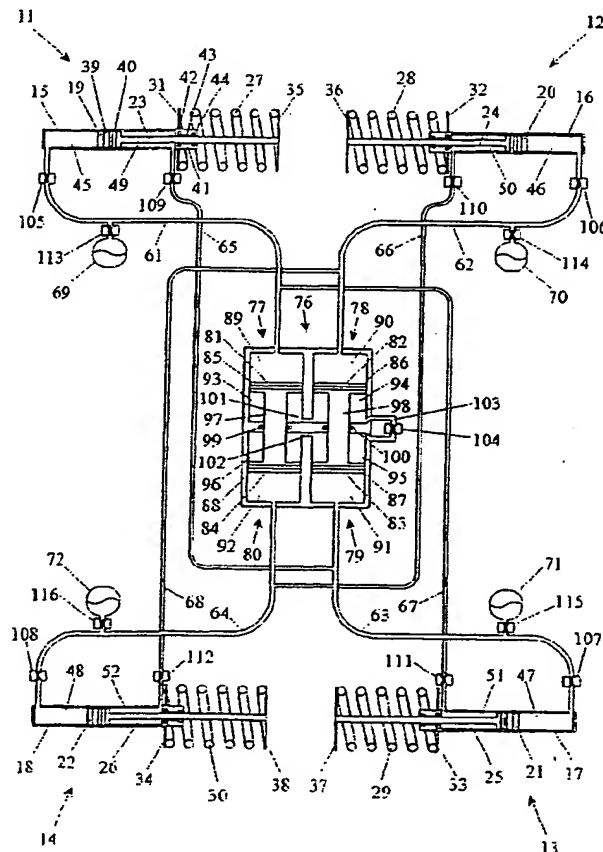
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(54) Title: HYDRAULIC SUSPENSION SYSTEM



(57) Abstract: A damping and stiffness system for a vehicle suspension system including at least two forward and two rearward wheel assemblies each associated with vehicle resilient support means (27-30) between a vehicle body and the wheel assemblies. The damping and stiffness system including: a wheel ram (11-14) with at least a compression chamber (45-48) between each wheel assembly and the vehicle body and a load distribution unit (76). The load distribution unit (76) includes two pairs of chambers (77-80), each chamber (77-80) being divided into front (89, 90) and back (91, 92) system chambers (which vary in volume proportionally and in opposite senses therein with piston motion) and the remaining pitch chambers (93-96) by interconnected pistons (81-84) supported therein. The compression chamber (45-48) of each wheel ram (11-14) is in fluid communication with a respective system chamber (89-92) wherein the vehicle is primarily supported by the vehicle resilient support means (27-30).

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